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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,091

04/07/2004

Yulu Wang

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7590

03/20/2008

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EXAMINER

SELLMAN, CACHET I

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,091	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> CACHET I. SELLMAN	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10,11 and 14-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-8, 10-11, and 14-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Acknowledgement is made of the amendment filed by the applicant on 12/21/2007, in which claims 1, 2, 10, 11 22 and 26 were amended. Claims 1, 2, 4-8, 10-11, and 14-29 are currently pending in U.S. Application Serial No. 10/820,091.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-2, 4-8, 10-11 and 14-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In independent claim 1, the applicant has amended to claim the use of a "non-vibrating high pressure vessel" however, in the specification there is only support in using a high pressure vessel. In the specification there is no negative limitation of using a vibrating versus nonvibrating vessel also the applicant does not state specifically that the vessel is vibrating. Therefore, there is not any support for using specifically non-vibrating versus vibrating high pressure vessel.

3. In claim 1, the applicant also claims the use of "nanoparticles or submicron particles having a particle size of less than about 500nm," however, the specification does not show support in using particles having such size. In the examples used in the

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specification, the particles being coated are 600nm. Furthermore, there is no teaching in the specification of using specifically particle sizes of less than 500nm.

***Claim Rejections - 35 USC § 103***

4. The previous 103 rejection over Subramaniam is withdrawn due to the applicant's amendment to the claim to include smaller sized nanoparticles than those described in the Subramaniam.

5. The previous 103 rejection over Gupta et al. is withdrawn due to applicant's amendment to the claims to include the limitation of combining the supercritical fluid and the suspension in a non-vibrating high pressure vessel.

6. The previous 103 rejection over Perrut in view of Lee is withdrawn because Perrut does not teach the combination of the nanoparticles with the polymer and organic solvent rather Perrut teaches the combination of the particles with the antisolvent (supercritical CO<sub>2</sub>).

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al. (US 2003/0146529) discloses a process of encapsulating nanoparticles in a polymer. The process comprises combining nanoparticles having a diameter of about 5 - 100nm with a solution of polymer and a solvent. The mixing of the solution with the nanoparticles requires sonication. A nonsolvent is mixed with the mixture of nanoparticles, polymer and solvent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CACHET I. SELLMAN whose telephone number is

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(571)272-0691. The examiner can normally be reached on Monday through Friday,  
7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman  
Examiner  
Art Unit 1792

/C. I. S./  
Examiner, Art Unit 1792

/William Phillip Fletcher III/  
for Timothy H. Meeks, SPE of Art Unit 1792/1700